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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,743	11/12/2003	Henry David Hayes	B162 1120.1	7541

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EXAMINER	
LEE, GUNYOUNG T	
ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/706,743	HAYES, HENRY DAVID	
	Examiner	Art Unit	
	Gunyoung T. Lee	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/12/2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "lens cover 65 as shown in Fig. 1" in p. 5, lines 12-13; "line A-A of Fig. 3" in p. 6, line 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "66" in Fig. 1 and 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 6,017,140) in view of Johnson et al. (US 4,255,746).

3. In regards to claims 1-7 and 9, Chou discloses a multifunctional bicycle lamp having:

- A housing (Fig. 1 and 2) containing a power source (Fig. 2, 15, batteries);
- A primary bulb (22) and at least one LED bulb (18);
- A sensor (Fig. 3, 16, microprocessor with power testing function) connected to the power source (15), the primary bulb (22), and the at least one LED bulb (18);
- Wherein the safety light can be operated at half the first power to maintain the primary bulb (22) at half illumination (col. 2, lines 42-55);

- Wherein the at least one LED (Fig. 2 and 3, 18) can be operated in a flashing mode (col. 2, lines 61-63);
- An activation button (Fig. 12) that can be activated to select between an off condition, a primary bulb (22) operation condition, and a LED (18) operation condition of the safety light (Fig. 4);
- Wherein the primary bulb operation condition includes a fully illuminated bulb position and a half illuminated bulb position (Fig. 4, and col. 3, lines 13-17 and 28-34);

4. In regards to claims 1-7 and 9, Chou shows the invention substantially as claimed except for a sensor which determines if the available power is inadequate to supply the first power, and the sensor switches the safety light from operation of the primary bulb to operation of the at least one LED bulb.

5. In regards to the sensor which detects the available power and switches the safety light from the primary bulb to a LED when there is insufficient power to operate the primary bulb, Johnson et al. disclose a safety unit circuitry (Fig. 4) having:

- A sensor unit (50, low voltage dropout system) which monitors the voltage of the power source (46, batteries) continuously and determines that the available power is inadequate to supply the first power (12, light bulb), the sensor unit switches from the operation of the primary bulb (12) to operation of a low power consuming circuit element (49, audible alarm) (col. 4, lines 23-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the circuitry of Johnson et al. for the multifunctional bicycle lamp of

Chou to provide the safety light continuously even though there is insufficient power for the primary light bulb from the power source (e.g. battery). The bicycle rider can easily notice the change of the light or light intensity at night. Therefore, the rider can take some action before the power in the battery becomes totally empty. It is well known in the art that the low power consuming LED bulb (Fig. 2, 18) of Chou can be placed in the position of the audio alarm (Fig. 4, 49) of Johnson et al..

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 6,017,140) and Johnson et al. (US 4,255,746) as applied to claims 1-7 and 9 above, and further in view of Schmidt (US 4,290,095).

7. Chou and Johnson et al. show the invention substantially as claimed except for a LED operation condition which includes a steady LED position and a flash LED position.

8. In regards to the LED operation condition with steady and flash modes, Schmidt discloses an aiming post light system with a flashing/steady LED (Fig. 1, 44 and col. 4, lines 3-6) as the light source. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the flashing/steady LED unit of Schmidt for the multifunctional bicycle lamp of Chou modified by Johnson et al. to provide various lighting methods which increases the visibility of the bicycle by others especially at night or cloudy day. Thus, it will increase the safety of the rider.

9. Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 6,017,140) and Johnson et al. (US 4,255,746)

10. Claims 10-15 recite operation method of the safety light system whose structural limitations are claimed in claims 1-9. Chou and Johnson et al. disclose all the elements claimed in claims 1-9 as described above. The applicant's operation method described in claims 10-15 dose not provide any additional advantage or useful results. It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to operate the multifunctional bicycle lamp of Chou modified by Johnson et al. in the method recited in claims 10-15 to provide a sufficient light while monitoring the available battery power to improve the safety of the bicycle rider at night or cloudy day.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lebens (US 6,095,661) show an LED flashlight having a plurality of LED (Fig. 2, 150) and a control circuit (Fig. 3) measuring and proving information of the remaining batter power using a feedback circuit (160). Chopra et al. (US 6,286,976) show an emergency light module having a battery pack (Fig. 3, 22) and a voltage measuring circuit (56). Gilpin (US 2003/0067769) shows a multiple LED light system having a plurality of high intensity LED (Fig. 3, 1-7) and a switching/logic means (8) to automatically reduce the number of lighted LEDs based on the power usage and the available battery power (p.1, paragraph 9, lines 4-11).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached on 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL
6/4/2005

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